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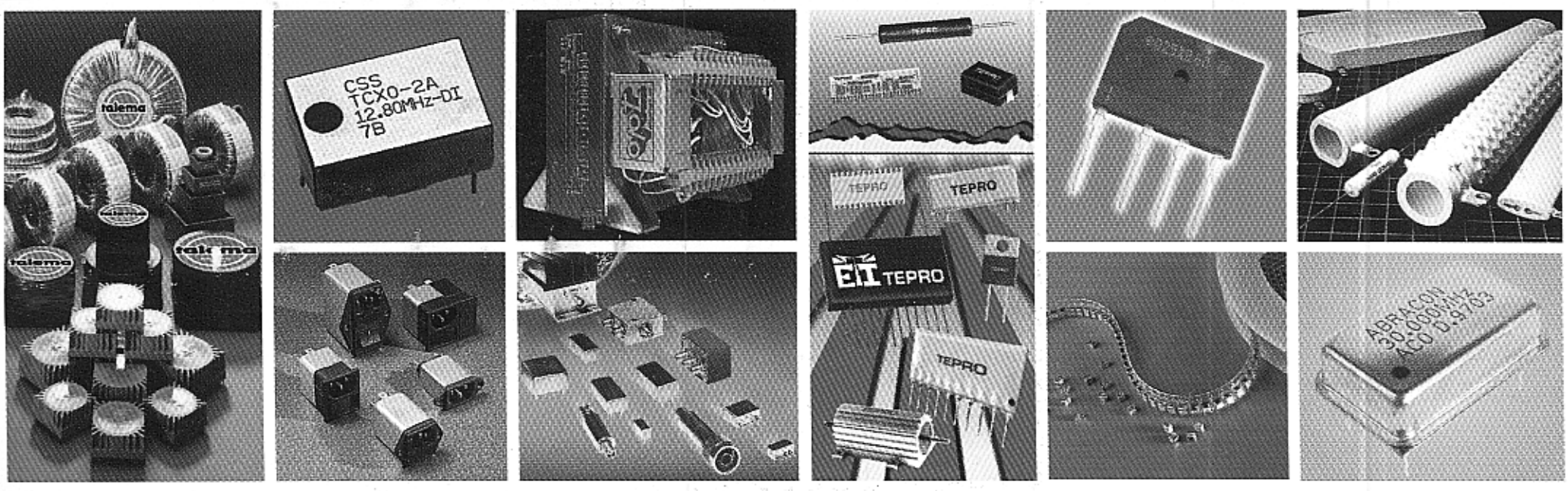

electronic components

40th EDITION

1500 Capacitors
1800 Coils, Chokes, & Inductors
1850 Cores, Magnets, & Ferrites
2300 Crystals, Oscillators, Crystal & Piezoelectric Filters
2350 Delay Lines
2700 Filters, Power
2750 Filters, RF & Signal
3130 Integrated Circuits, Hybrid Circuits, & Function Modules
3450 Microwave, RF, IF; Components, Systems, & Equipment
4700 Resistors
4750 Potentiometers, Trimmers, Controls, & Rheostats
4800 Discrete Semiconductors
5600 Transformers

volume B Electromechanical and electro-optical

volume C Interconnections, packaging, and hardware

volume D Power sources, instrumentation, computer products, and equipment

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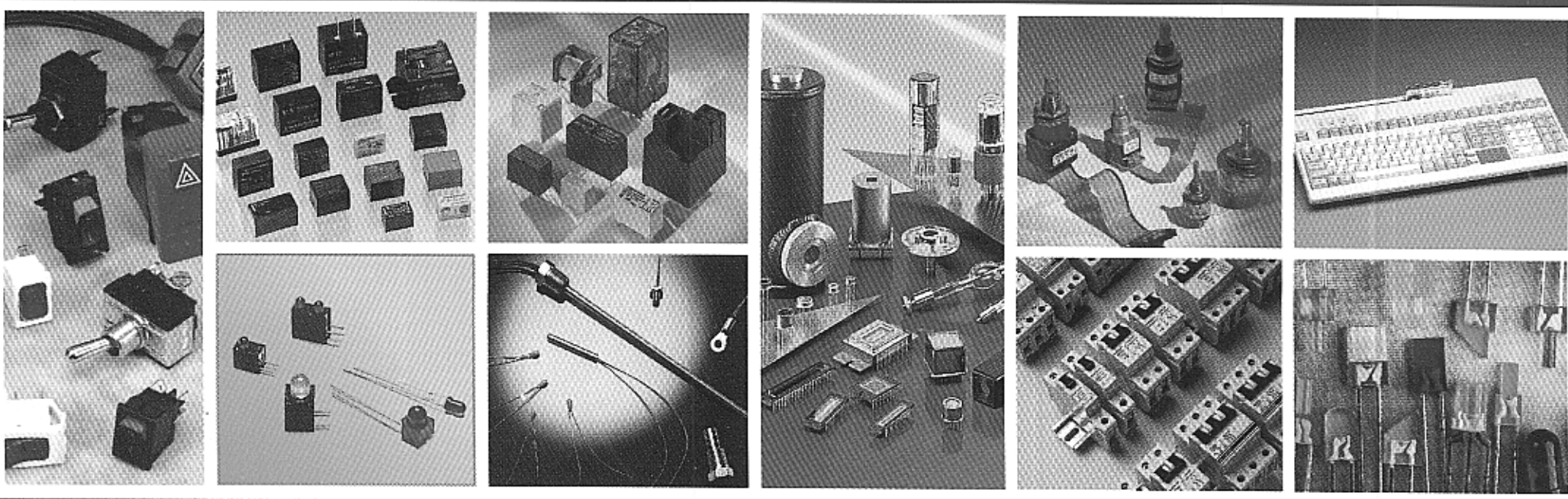

electromechanical and electro-optical

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2445 LAN Products
2450 Displays, Readouts, & CRTs
2460 Lamps, Lights, & Indicators
2475 Fiber Optic Equipment & Accessories
3500 Motors, Drives, & Rotating Equipment
3700 Electro-optical Equipment (Excl. Fiber Optics)
4300 Protective Components (Fuses, Circuit Breakers)
4500 Relays
4550 Solenoids
5100 Switches
5150 Keyboards, Keypads & Membrane Switches
5300 Thermal Components
5500 Transducers, Sensors, & Encoders

volume A Electronic components
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volume D Power sources, instrumentation, computer products, and equipment

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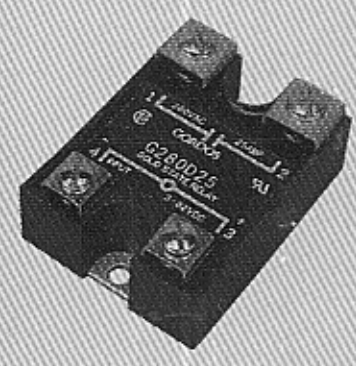

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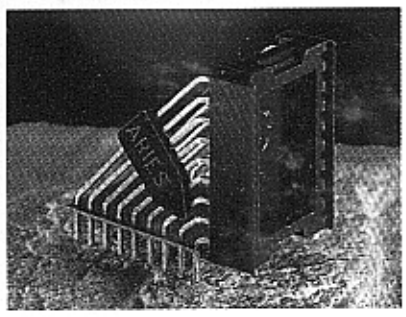

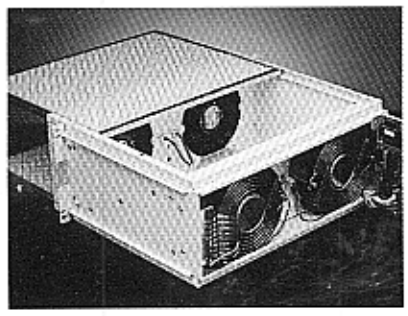

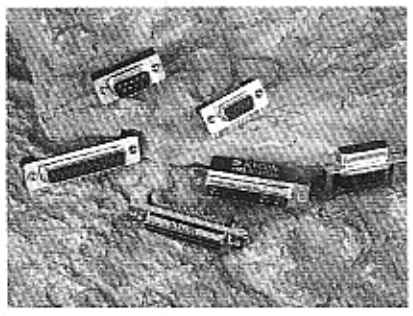

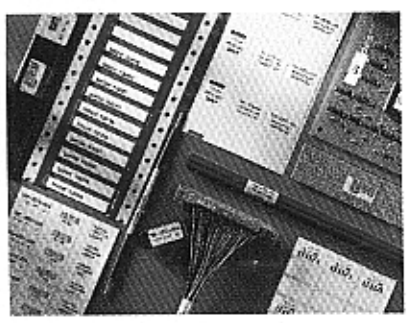

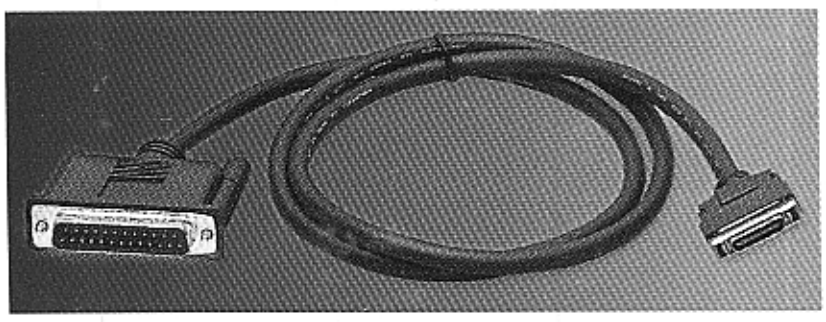

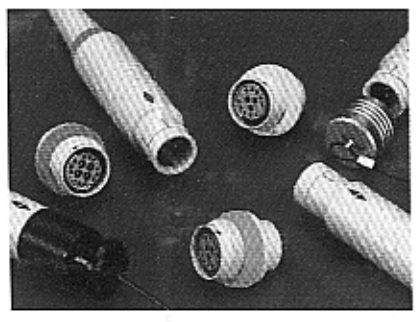

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1700 Circuit Boards (Printed), Materials, & Accessories
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2400 Panel Hardware (Bezels, Dials, Knobs, etc.)
2500 Hardware & Mechanical Components
2600 Fans, Blowers, Cooling Equipment, & Heat Exchangers
3100 Insulators & Insulating Equipment
3200 Interconnection Systems (Backpanels, Card Holders, and Packaging Systems)
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4525 Shields & Shielding
4600 Soldering & Desoldering Equipment
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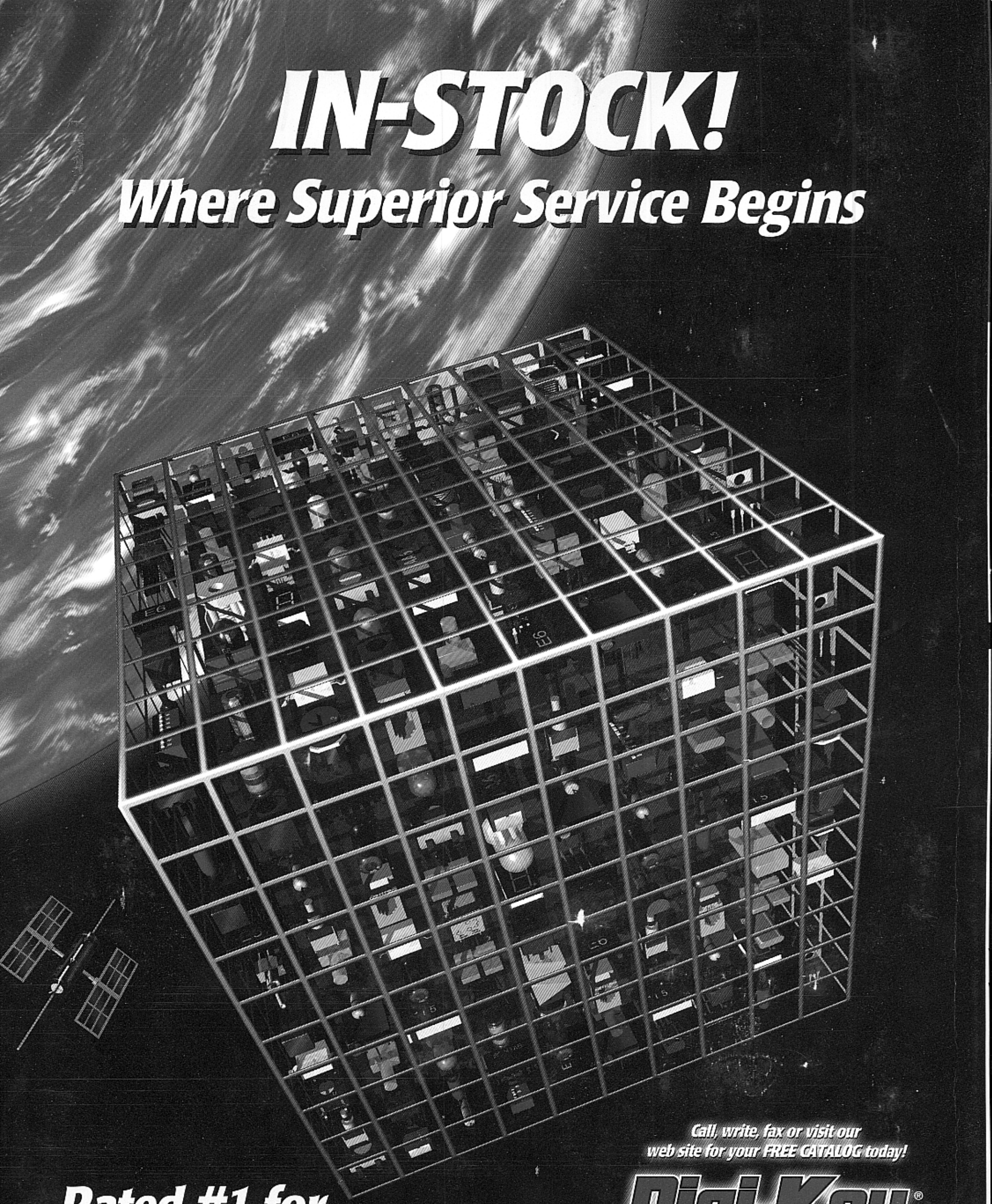

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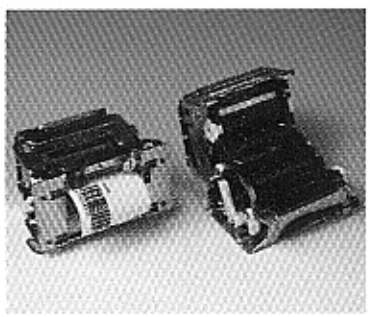
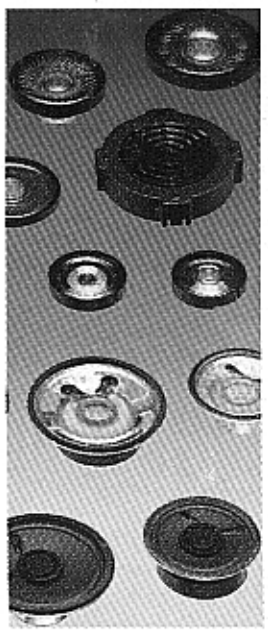

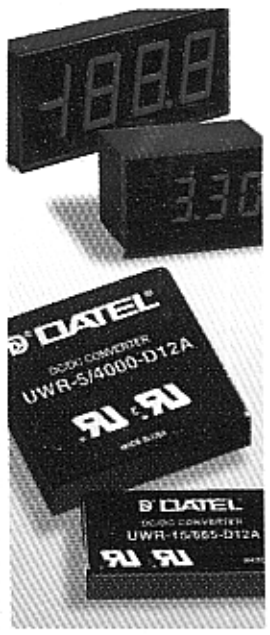

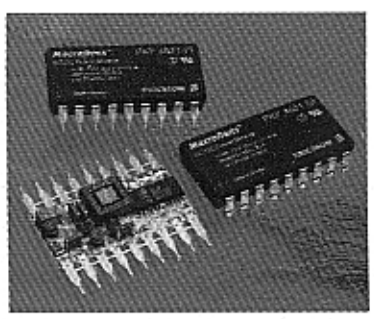

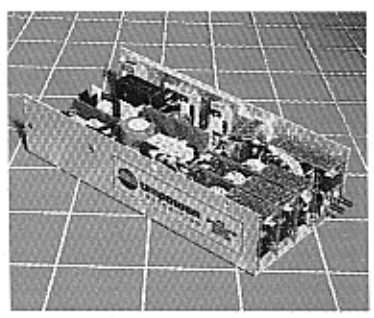
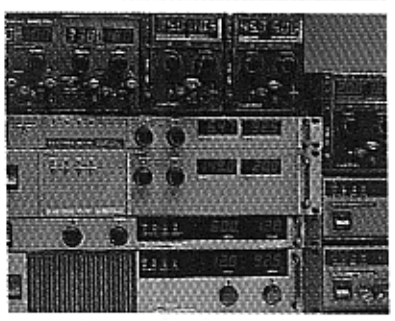

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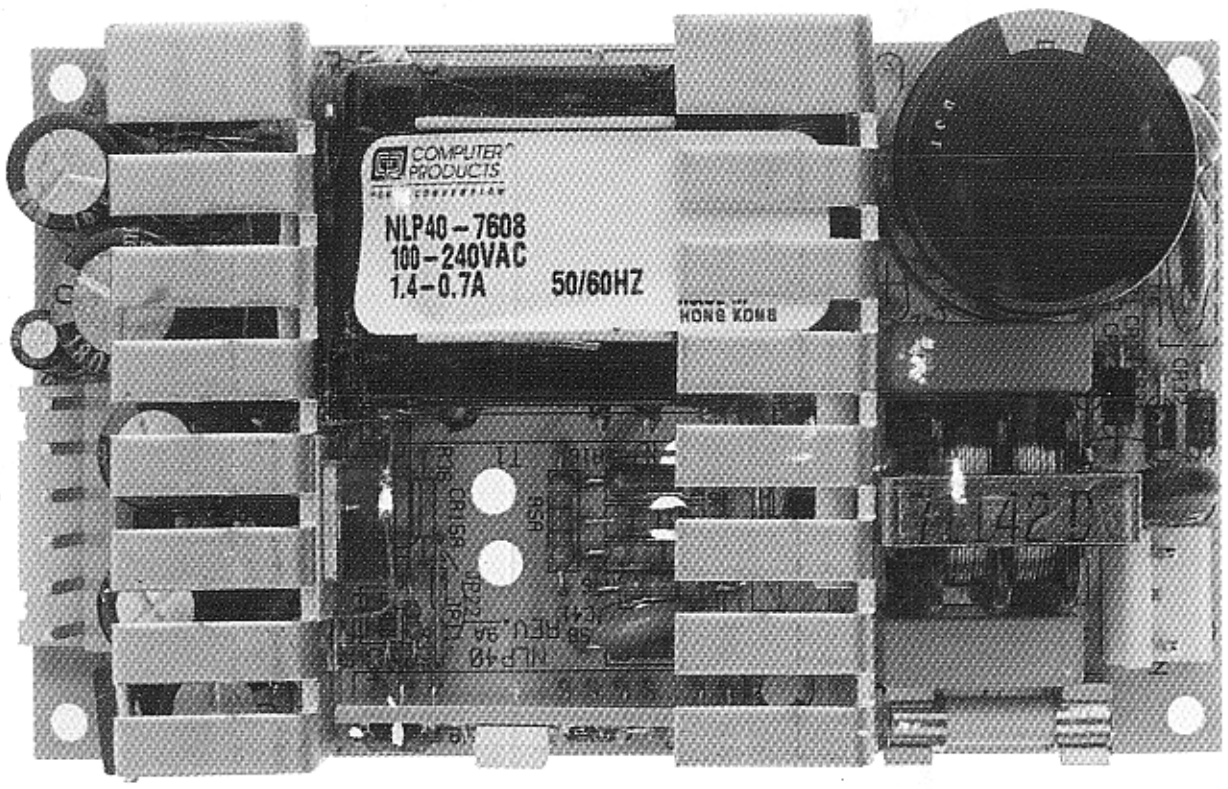

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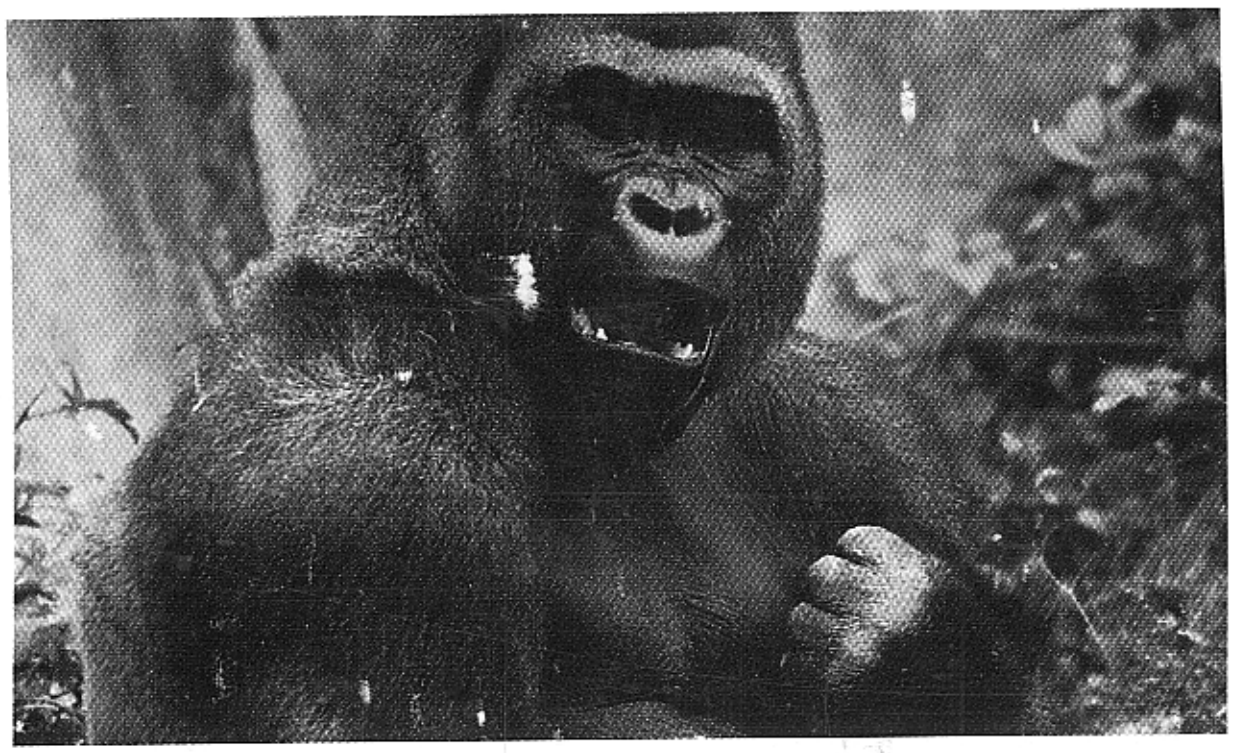

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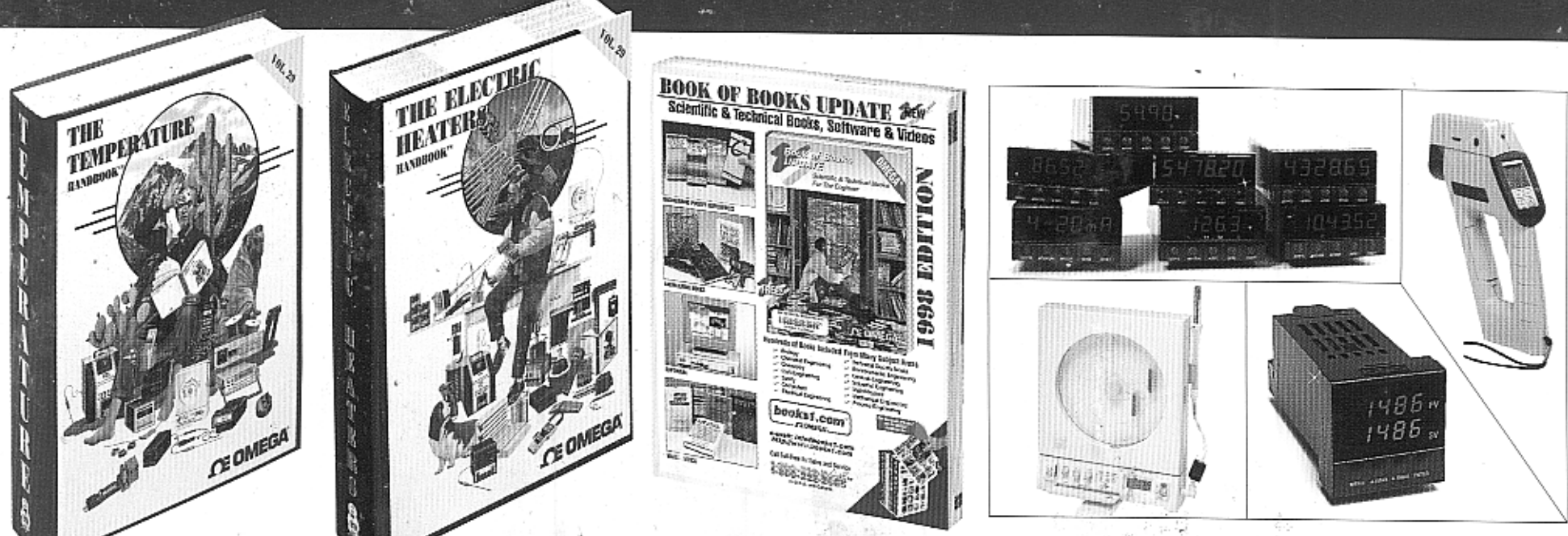

Temperature, Electric Heaters and Book of Books

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- Thermocouple Probes and Assemblies
- RTD and Thermistor Probes
- Thermocouple Connectors and Panel Systems
- Thermocouple, RTD and Thermistor Wire
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- Precision Calibration and Handheld Instruments
- Digital Panel Meters and Controllers
- Transmitters, Amplifiers and Power Monitoring

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Complete Index For Volumes E & F Located Inside

Volume 29 OMEGA Complete Temperature Measurement Handbook and Encyclopedia®

Table of Contents

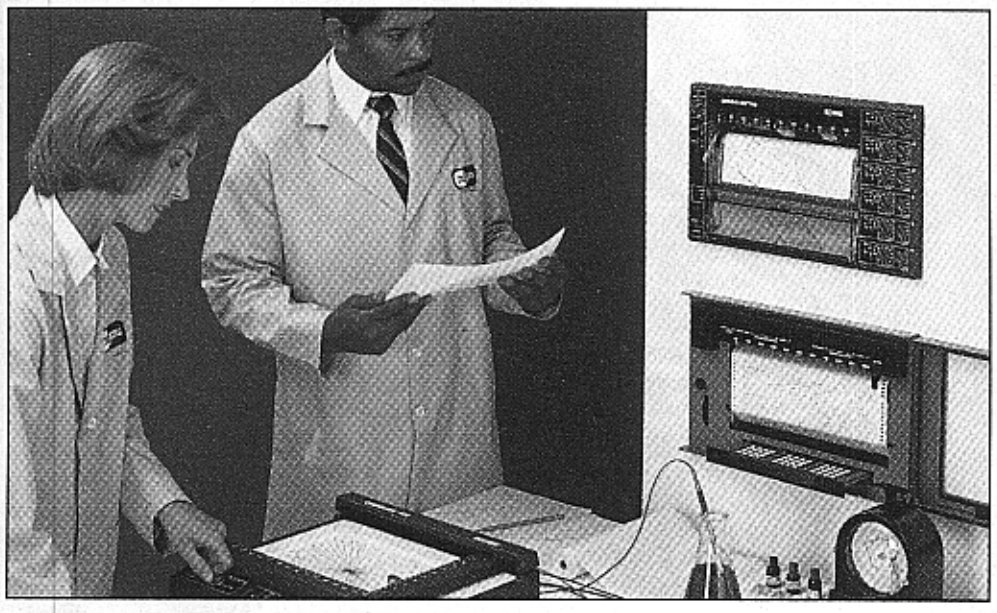
Welcome to the Vol. 29 OMEGA Complete Temperature Measurement Handbook and Encyclopedia®. This edition of the Temperature Handbook has been revised and reorganized for ease of use.

The Table of Contents to the right highlights these changes. Temperature measurement sensors are located in the beginning sections. All thermocouple probes and sensors are now located in section A. Following probes and sensors are connectors and wire. Following these sections are the instrumentation sections, including meters, transmitters, controllers, data acquisition, recorders and datalogging equipment.

This edition of the Temperature Handbook also includes a much larger selection of infrared temperature measurement instrumentation and reference material.

The Vol. 29 Temperature Handbook has been designed to be the best handbook produced by OMEGA, easier to use, with the largest product selection ever available from OMEGA.

Data Acquisition Equipment is now located in Volume F, under Data Acquisition, Sections B and C



Recorders and Dataloggers:
See Section S in *Volume E*, and Sections E & F in *Volume F*

A Thermocouple Probes and Assemblies

B Industrial Thermocouple Assemblies

C RTD Probes and Assemblies

D Thermistor Probes and Assemblies

E Glass Bulb and DialTemp™ Thermometers

F Labels and Cements

G Connector Systems and Panels

H Wire: Thermocouple, RTD and Thermistor

Hu Relative Humidity Instruments

J Infrared Temperature Measurement

K Precision, Calibration and ice point Reference Equipment

L Handheld Instruments for Temperature

M Digital Panel Instrumentation

N Transmitters and Amplifiers

P Controllers and Switching Devices

Q Power Monitoring

R Data Acquisition Equipment (This section is now located in Vol. F under Data Acquisition, Sections B and C)

S Recorders and Datalogging (See Section S in *Volume E*, and Sections E and F in *Volume F)*

T Cryogenics and Superconductivity

Y Technical and Scientific Books

Z Technical Reference

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Volume F

Pressure, Flow and Level, pH and Conductivity, Data Acquisition

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- Instrumentation
- Strain Gages
- Load and Force Measurement
- Displacement Measurement
- Valves and Regulators

Flow and Level

- Variable Area Flowmeters and Rotameters
- Air Velocity Measurement
- Mass, Ultrasonic Doppler, Turbine, Vortex Shedding, Magnetic Flowmeters
- Level Measurement Systems
- Pumps, Mixers, Tubing and Fittings
- Instrumentation and Accessories

pH and Conductivity

- Field, Laboratory, and Industrial Instrumentation
- Laboratory and Industrial Electrodes
- Conductivity Instrumentation
- Dissolved Oxygen Instruments
- Water and Soil Analysis Instrumentation

Data Acquisition

- PLCs and Industrial Computers
- Data Acquisition and Engineering Software
- Communications-Based Acquisition System
- Plug-In Cards
- Dataloggers, Recorders, Printers, and Plotte
- Auto Dialers and Alarm Monitoring Systems
- Signal Conditioners, I/O Modules, Relay Pan

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See Volume E for Complete Index

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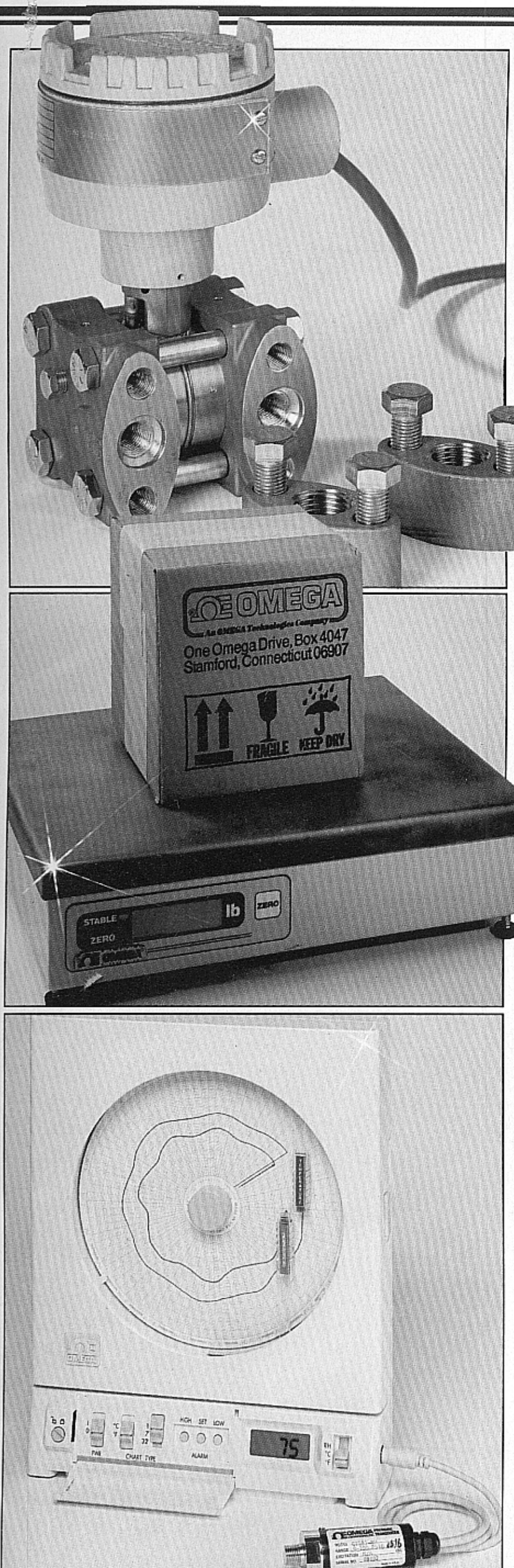

A: NEW PRODUCT SHOWCASE
A Preview of All the New and Exciting Products

B: TRANSDUCERS
An Extensive Variety of Pressure Transducers

C: ACCESSORIES
All the 'Nuts and Bolts' to Complete Your System: Control Modules, Wire, Power Supplies, Etc...

D: INSTRUMENTATION
Complete Instrumentation Packages to Turn Your Transducer into a Measurement and Control System

E: STRAIN GAGES
A Complete Selection of Strain Gages, Accessories and Instrumentation

F: LOAD AND FORCE MEASUREMENT
A Diverse Selection of Load Cells and Torque Devices

G: PRESSURE GAUGES
Dial Gauges in All Sizes and Accuracies

H: PRESSURE SWITCHES
Miniature and Industrial Switches for General Purpose, Watertight or Hazardous Locations

J: DISPLACEMENT MEASUREMENT
LVDT Transducers and Instrumentation for Precision Displacement Measurement

K: DYNAMIC MEASUREMENT
High Speed Accelerometers, Load Cells, Pressure Transducer and Accessories

L: VALVES AND REGULATORS
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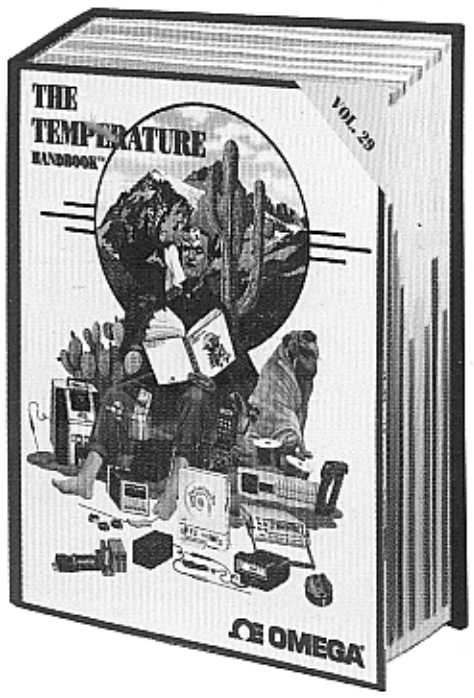

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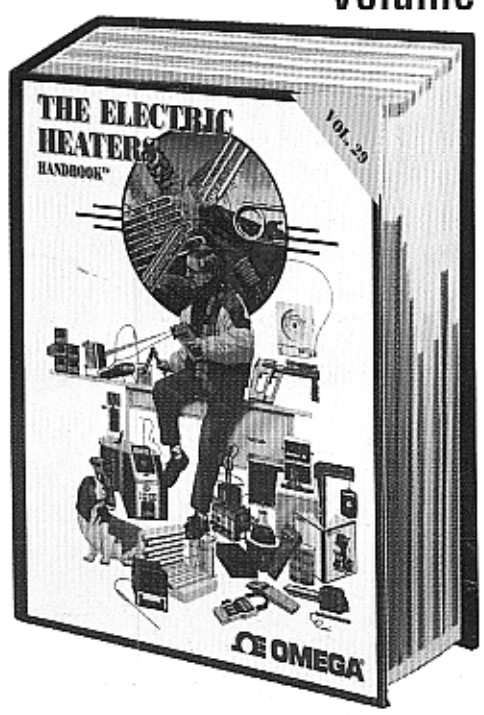

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Flow and Level
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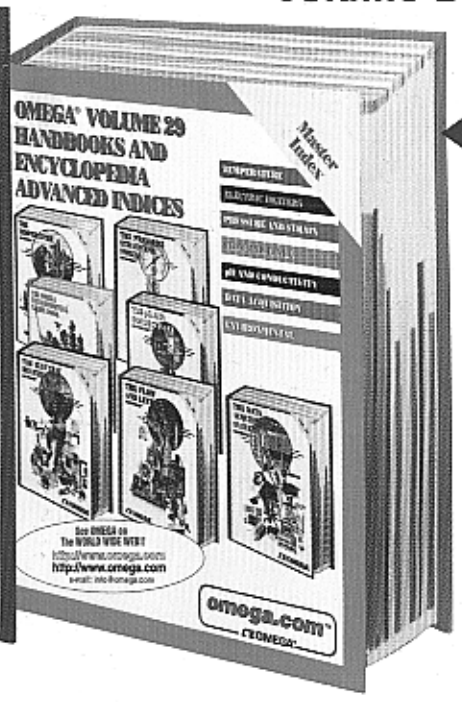

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